

ABSTRACT

A water purifying apparatus is constructed having a plurality of vertical, water-carrying tubes circularly arranged so as to form a hollow central region enclosed by the tubes. A top cap and bottom cap are configured so as to channel water through the tubes in serial relation and alternately in upward and downward directions. The hollow central region forms a last water-carrying chamber, and houses a bubble separator and ozone generator. A venturi mixes ozone at an inlet to the first water-carrying tube. The ozone generator is constructed having an ultraviolet-transmissive tube sealed from the water in the hollow central region, and contains an ultraviolet lamp that in addition to generating ozone, provides ultraviolet light to kill pathogens that survive the ozone treatment and also disassociates ozone. A closed loop system may be implemented by providing gas from the bubble separator back to the venturi,